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Reports on major Polish cities

# *Tri-City*

2011



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# Tri-City

*After a number of difficult decades, Polish cities have now set themselves on a path of rapid development that offers them the opportunity to catch up with other Western European cities and greatly enhance the quality of life of their residents. It is doubtful whether Polish cities have ever before had such a tremendous opportunity.*

Despite many difficult years of transition in Poland, sound market-based economic, democratic and socio-political institutions have been built, enabling civic activity to flourish. Cities have taken more and more responsibility for their own strategic decision-making, and for delivering ever greater affluence and quality of life for their residents. The European Union's "Leipzig Charter" sets out urban development principles, stating that development should strive to be sustainable, to satisfy economic prosperity, social equilibrium, environmental, cultural and health goals, and to deliver effective democratic institutions. Poland's membership of the European Union has meant that Polish cities have had unprecedented access to development funds to help them to reach these goals.

In the previous version of this report published in 2006, we principally tried to estimate where cities were at in terms of their access to \ development capital at the point where their growth was just taking off. In accordance with a methodology developed by PwC (formerly PricewaterhouseCoopers) we identified "seven capitals", each of which relates to a crucial area of development, and then estimated each from number of selected indicators.

We have now repeated this process, with a number of key enhancements. We increased the number of cities analyzed from 7 to 11, added a number of indicators that were not available in 2006, and have also been able to assess the rate of change evident between 2006 and 2010 on the basis of the differences between the two reports.

The level of development capital in Polish cities today is a legacy of past events in the region. Polish cities suffered many years of slow growth, followed by a transformation during which a great deal of painful economic restructuring was necessary. It experienced rapid, sustainable growth between 2005 and 2008, only to find itself hit by the global financial crisis. The accompanying radical increase in funds from the European Union budget for regional development offered Polish cities the opportunity to markedly improve development capital in the seven key areas. However, the accumulation of development capital is necessarily a long-term process, and it is often only after years that the payoffs for residents, in terms of increased income, economic activity and quality of life, are evident.

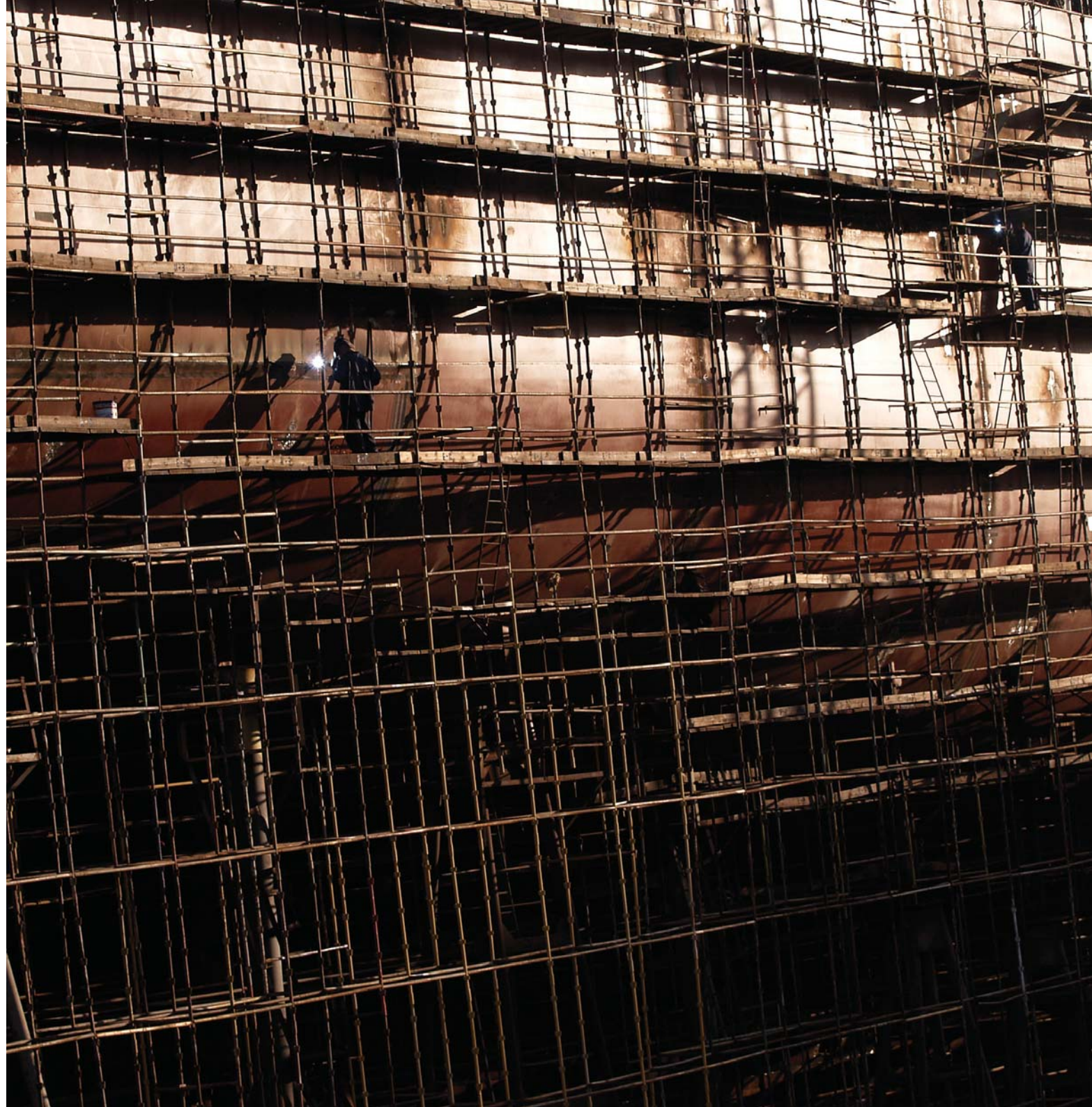
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PwC's Chief Economic Advisor

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*Every city must have a certain amount of development capital in order to develop. Over the past few years, Polish cities have managed to clearly increase this capital.*

## Methodology

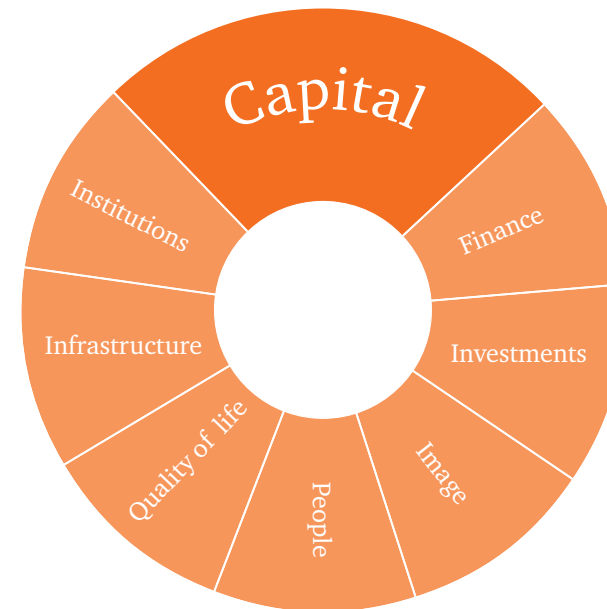
### **The seven types of capital of Polish cities**

Over the past few years, Polish cities have substantially increased their capital. However in many ways, they still find themselves lagging behind the cities of western Europe that they seek to compete with and be compared to.

There are likely to be large amounts of development funds available to Polish cities in the coming years. The purpose of this report is to evaluate the level of development capital of Polish cities now. In doing so, it offers a perspective on the major strengths and weaknesses of Polish cities that will support the development of clear strategies and priorities to enable Polish cities to make the best use of those funds to achieve their goal: to transform themselves into modern, flourishing vibrant population centres.

The measurement of the growth potential of Polish cities is based on a methodology developed by PwC (formerly PricewaterhouseCoopers). It is based on the principle that solid development requires a number of different resources, termed the city's "capitals", to be present at the same time.

We mostly commonly think of the term "capital" in a financial sense. However, modern economics uses and understands the term much more extensively, as applying not only to money but also to resources like the qualifications, knowledge and experience of a population (human capital), the number and quality of their interactions (social capital), and even the value attributable to the way a city is perceived (image capital). These each represent necessary resources for development, and only with skilful investment over years will they mature.



*A city with high development potential is a city with all 7 capitals well and evenly developed.*

## Methodology

### **Seven development capitals**

In analysing the development potential of Polish cities, we use the concept of 7 capitals, each of which is important for the city's development:

- **Human and Social Capital (HSC)** defines the quality of human resources at a city's disposal. This includes the knowledge and qualifications of its workers, the demographic structure (cities with an ageing population are less dynamic than 'young' cities) and the social activity of the inhabitants.
- **Culture and Image Capital (CIC)** relates to how a city is perceived: as an interesting and attractive place, or a cultural desert, for example. The better the image, the easier it is to attract investors to the city and boost the economic and social activity of its residents.
- **Quality of Life Capital (QLC)** reflects the living and working conditions the city offers. It consists of such ingredients as the state of the natural environment, level of health care, quality of educational institutions and people's sense of security
- **Technical and Infrastructure Capital (TIC)** relates to the infrastructure, as broadly defined, of a city: its housing stock, roads, transport systems, as well as shopping centres, ATMs and internet access.
- **Institutional and Democratic Capital (IDC)** reflects the efficiency of the municipal institutions (government and administration) and the level of civil society activity.
- **Investment Attractiveness Capital (IAC)** tells us how strong a magnet the city is for investors, both foreign and domestic.
- **Sources of Finance Capital (SFC)** specifies the extent to which the city is able to obtain cash to finance development.

A city with high development potential is a city with all 7 capitals well and evenly developed. If one of the capitals is less developed, this suggests weakness – and indicates a direction for strategic remedial action.

All of the indicators are defined and calculated in such a way that a higher value indicates that the capital is of a higher quality. It is always measured relative to the average for the 11 cities surveyed, which is 100.

The report's authors have made every effort to source comparable data, and have used the most recent available data (generally from 2009-2010).

Apart from measuring the level of development of the 7 individual capitals in the 11 cities in 2010, the study also tries to measure the change in the capitals that took place between the last and present editions of the report, i.e. 2006-2010 (noting that the previous edition covered only seven Polish cities.)

Due to methodological differences, a direct comparison of the changes between 2006 and 2010 cannot be made; therefore, capital change is measured using a simplified methodology. As such this results in an estimate, and caution should be exercised in its use.

It should also be noted that, where growth rates are concerned, a lower starting point offers greater scope for growth than does a higher starting point. This should be factored in when considering the estimates of growth provided here.

## General data on the cities included in the study



Data on the population from the end of 2009, GDP from 2008 (the latest available CSO data).  
Source: CSO, PwC

## How to read the radar charts in the report?

A radar chart allows us to analyse the city's capital in several areas at the same time: the more indicators being considered, the greater the number of axes on which we place values.

When connected, the points on the axes form a shape (triangle, square, pentagon) where the number of vertices is equal to the number of axes. These diagrams depict a given city's capital development (in red) against the average for the 11 major cities surveyed (in grey).

## When analysing the chart, attention should be paid to:

- The size of the image area – the larger the area, the greater the capital.
- The shape of the figure – the more proportional it is, the more balanced is the development of the individual capitals. “Pulling” of the shape in any direction suggests that the capital in that area is more developed than the average, while “recession” along any of the vertices indicates relative underdevelopment.

# Study results

## General observations

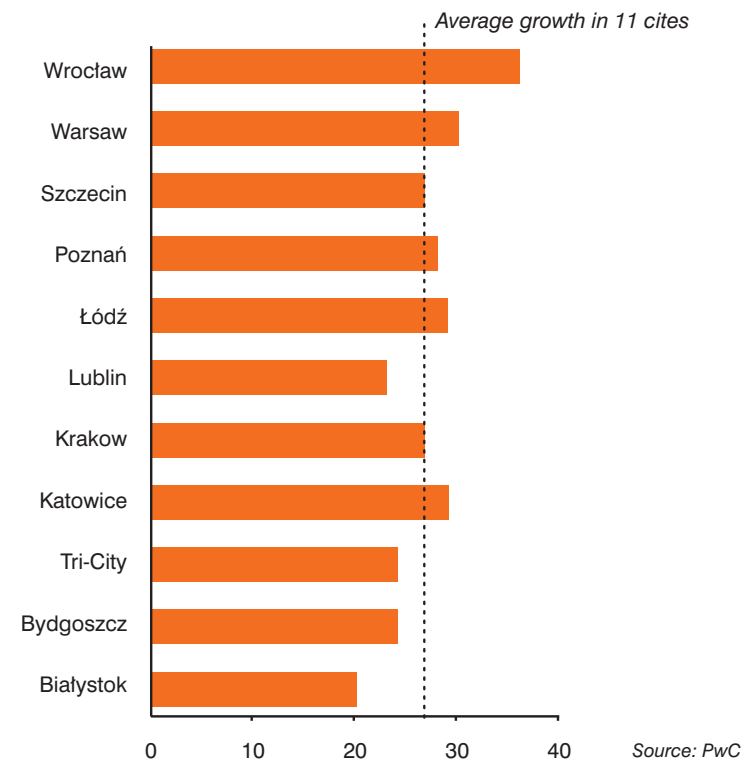
### A good five years

The past five years (2006-2010) have proven very positive for Polish cities. The country's development accelerated after Poland's accession to the European Union, partly due to the enormous opportunities created by unprecedented increases in regional development funds. Importantly, this has shown clear results in terms of increases in income and quality of life, improved infrastructure, and more efficient public institutions. The index of economic development\* measured for the 11 Polish cities covered by the survey shows a marked improvement in all the cities – its value has increased on average by 27%.

The fastest economic development over the period 2006-2010 was recorded by Wrocław and Warsaw, followed closely by Poznań, Krakow, Katowice and Łódź. A slightly slower than average rate of development was observed in Szczecin, the Tri-City area and Bydgoszcz. However, the main regional metropolitan centres of the “eastern wall”, Lublin and Białystok, developed somewhat more slowly, despite additional special development resources being targeted at these regions from European Union funds. This suggests that serious structural problems continue to hamper market-driven economic growth efforts there.

\* representing the weighted average of GDP growth per capita (real) from 2005-2007, growth in real incomes 2006-2010, and reduced unemployment.

Growth index of the economic development of Polish cities, 2006-2010





# Study results

## Growth of 7 capitals

### Development capital increased everywhere

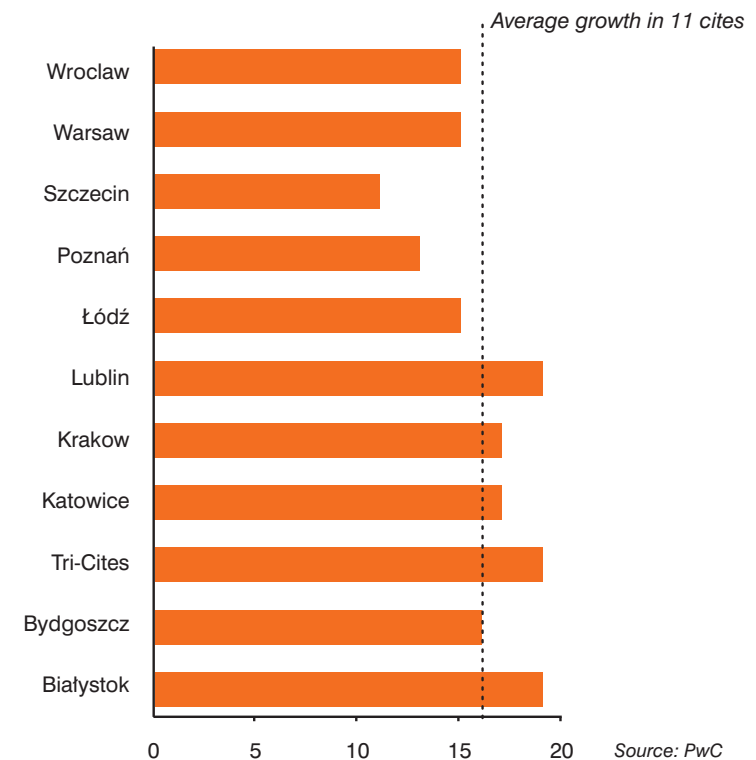
Polish cities took advantage of good development conditions in 2006-2010 to significantly increase their development capital. We estimate this growth to be 16% on average, meaning that each type of capital increased, on average, by this amount in each of the cities studied.

However, development has not been uniform. The greatest successes were achieved in the areas of Investment Attractiveness Capital and Culture and Image Capital, whereas the slowest progress was made in the areas of Technical and Infrastructure Capital and Quality of Life Capital. This is not surprising, as infrastructure is built up over many years while quality of life only increases as a consequence of sustained successes in other areas.

Of the cities studied, the fastest average growth of the 7 capitals was recorded in Lublin, Białystok and the Tri-City area. To a large extent, this is the result of the large amounts of development funding, mainly from the EU, that have been directed to Poland's eastern cities. However, this increase has not yet translated into accelerated economic growth among other "eastern wall" cities.

Capital grew at a rate that was slightly above average in Kraków and Katowice, and slightly below in Bydgoszcz, Łódź, Wrocław and Warsaw. However, the development capital of Poznań and Szczecin increased noticeably more slowly. It is worth re-stating, at this point, that a lower initial level offers greater scope for growth than does a higher starting point, and that this factor may be influencing these results.

Estimated growth of the average value of 7 capitals of Polish cities, 2006-2010



# Study results

## Comparison of capital growth

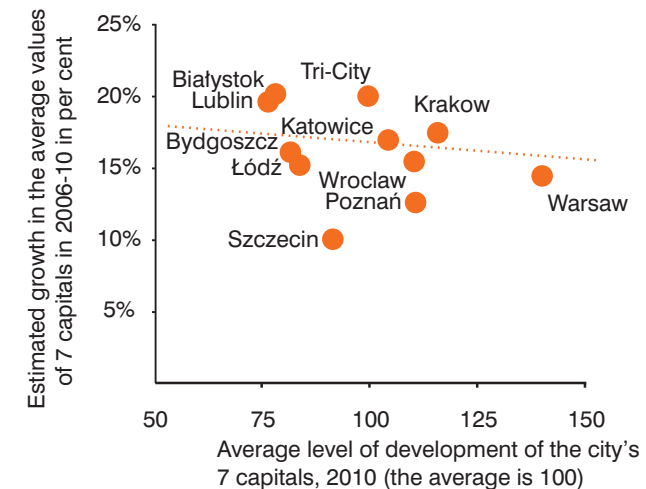
### Disparities are slowly declining

Generally speaking, over the period 2006-2010, the lower the starting level in a given city, the faster was its average increase in capital, leading to reduced inter-city disparities. This trend is so far relatively weak, but it should strengthen with the adoption of appropriate strategies for city development and the effective utilisation of development resources. However, we note that in the case of Szczecin and to a lesser extent Poznań, the estimated average capital growth was markedly slower than might have been expected.

### Relationship between economic development and the capitals

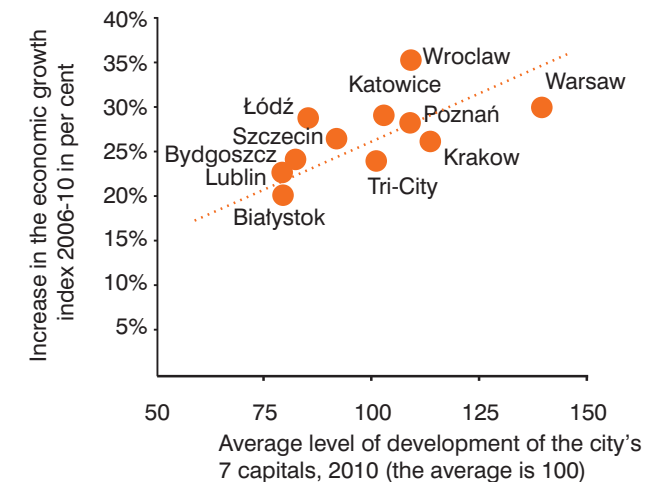
A high level of development of all 7 capitals indicates favourable economic development conditions, and consequently better quality of life for a population. An analysis of the data on the average level of the 7 capitals recorded in the 11 cities studied, paired with economic development index data for the period 2006-2010, does indeed suggest a close relationship between the 7 capitals and economic growth. In the case of Wrocław, the results on economic growth are slightly better than would be expected given its 7 capital resources.

The level and growth of 7 capitals of Polish cities



Source: PwC

Level of 7 capitals and economic success of Polish cities



Source: PwC

# *Tri-City*

## Key conclusions and recommendations



# Tri-City

## Key conclusions and recommendations

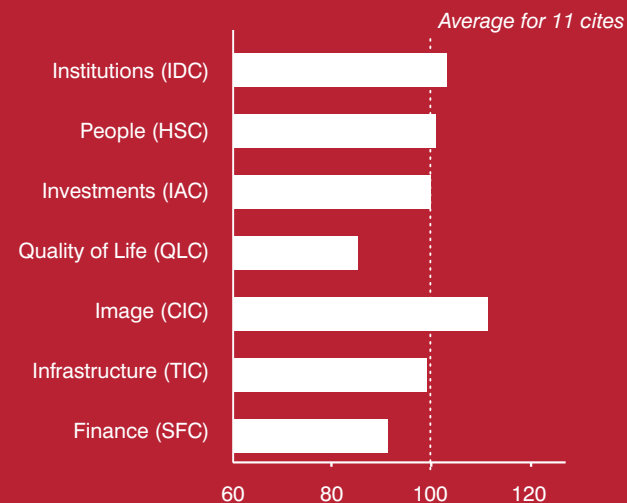
### **The coastal trio should join forces**

The Tri-City is a unique type of riddle. Theoretically, it could fight for second or third place among Polish metropolitan areas, although such ambitions would currently be decidedly premature with respect to the real opportunities. The agglomeration, which has every reason to be clearly distinguished from others, in most of the cases analysed in this study has values which are close to the average for the 11 cities.

The economy, infrastructure (although significant progress should obviously be noted – the current and expected imminent improvement in road and rail connections, the modernisation of the airport and sea ports of Gdynia and Gdańsk), human capital, the functioning of public institutions, image and investment attractiveness are positioned at an average level. Three areas of study turned out surprisingly low. Firstly, the health service. Secondly, the sense of security. Thirdly – and perhaps even the most painful – a place on the academic map of Poland.

*It is increasingly clear that deficiencies in these three areas, particularly the limited number of students and the availability of graduates can directly affect the development prospects of this metropolis.*

Tri-City – overall assessment of development of 7 capitals



Source: PwC

## Key conclusions and recommendations

The city needs, most of all, a clear and consistently executed image-improvement and promotion strategy, both in Poland and abroad. The strategy should acknowledge the city's heritage and current situation, however it should be focused on the future and emphasise its new directions for development. It should also be limited not just to Katowice, but encompass the potential of the entire region. The robust activity of the Metropolitan Association of Upper Silesia would be of considerable assistance in this.

### ***The city's main strengths:***

- Evenly developed capital
- High level of social activity
- Use of modern methods of financing urban investments

### ***Main challenges:***

- Establishment of effective cooperation in all areas between the cities making up the agglomeration – Gdynia, Sopot and Gdańsk
- Development of the academic base
- Improvement in the functioning of the health service
- Improvement in the sense of security

*People are the most important and the most valuable resource determining a city's chances for development. There is no substitute for people's skills, their willingness to work, and the business and social activity they engage in.*

# People

## **Why do we measure Human and Social Capital?**

People are the most important and the most valuable resource determining a city's chances for development. In the modern world, it is possible to buy almost anything. You can rent an advertising agency to promote a city, find investors to provide funds for infrastructure development, and build efficient administration and online systems for providing services to inhabitants. But there is no substitute for people's skills, their willingness to work, and the business and social activity they engage in. In the longer term, it is the people – the Human and Social Capital, being a set of characteristics describing the human resources – that determine a city's economic development and its success. Human Capital is typically associated with intellectual resources while Social Capital describes the quality of the civil society. It is easy to imagine that the level of Human Capital – people's intellectual capabilities and skills – translate directly into economic development.

However the reality is a little more complicated. Human Capital influences the community's economic development and improves its quality of life in less obvious ways, such as reducing corruption, fostering long-term investment and disseminating knowledge, preventing abuse of common goods, speeding the investment process (by reducing the probability that administrative decisions will be appealed). In addition, through development of the third sector, it is conducive to greater social control over actions taken by authorities. (Source: *Social Diagnosis 2009*.)

The value of Human and Social Capital depends on many factors. Some of them can be influenced only to a relatively small degree (e.g. demographic structure). It is also not possible to force people to conduct business or social activity – although attempts may be made to encourage them to do so and facilitate any initiatives to that effect. However, in certain areas e.g. in education or on the labour market, the potential for action on the part of municipal authorities is quite high.

## **Measuring Human and Social Capital (HSC)**

The Human and Social Capital score constitutes an aggregate measurement of the value of a city's human resources, taking into account the following five characteristics: demographics, education, and citizen's attitudes towards the free market, labour market activity and civil society engagement.

### **HSC: demographics**

The demographic make-up of a city is one of the most important determinants of its Human and Social Capital and is, in the first instance, defined by its age structure and the number of very young children. The basic demographic criteria used to measure HSC include the demographic burden ratio, the share of elderly in the city's population, and the number of births per 1000 inhabitants.

The demographic situation in the Tri-city is not very favourable for age dependency, being similar to the situation in Warsaw – the respective indicator here is almost 0.55. This is one of the highest rates reported among the respondents of the large Polish cities. The percentage of people of retirement age is also relatively high (19.4%) and places the city slightly above the average for the 11 cities. The situation regarding the number of births is more advantageous. The birth rate is relatively high – ranking slightly above the average for the 11 cities (10.3 children per 1,000 inhabitants, compared with the average of 10).

*With an average level of HSC regarding demographics for the 11 cities compared of 100, we estimate the Tri-City in this respect as being at **99.4**.*

*In a modern economy, the quality of the human resources of a population is determined largely by its skills.*

## People

### **HSC: education**

In a modern economy, the quality of the human resources of a population is determined largely by its skills. Measuring this therefore involves measuring the average education of the inhabitants: the better their education, the higher the city's attractiveness in terms of investing and conducting business activity.

With the importance of the information society and the knowledge-based economy, it is impossible to ignore such aspects of education as knowledge of information and communication technologies, knowledge of foreign languages, and access to education and training in these areas when discussing Human Capital attainment. However, in order to avoid the repetition of similar indicators for the individual Capitals, these aspects have been taken into consideration in the Investment Attractiveness Capital and Technical and Infrastructural Capital.

Here, HSC is measured in terms of share of persons with university and high school educations, the number of high school and university students per 1000 inhabitants, and newspaper readership (the percentage of people who regularly read one of the three main national dailies). These last two were introduced in this year's survey, which reduces the direct comparability of HSC with earlier reports.

The Tri-City's situation regarding the education of the population is slightly below the average for the 11 cities in terms of the percentage of the population with higher education (18.3%), while the ratio for secondary education is close to the average value for the centres analysed. The ratio of the number of students to the number of inhabitants and the percentage of young people in secondary schools are positioned relatively low. The index of newspaper readership is the lowest level after Lublin among the cities analysed.

*With the average level for 11 cities at 100, the Tri-City's HSC regarding qualifications is 86.0, which should be considered low in relation to the opportunities and needs.*

# People

## **HSC: attitudes towards the free market economy**

Development is also affected by the attitude of citizens towards the market. In locations where people are more pro-market, they adapt more easily to the demands of the market and are more economically active and successful.

HSC in this area is measured by the proportion of persons engaged in business activity.

The situation in this respect in the Tri-City is close to the average for the cities analysed (14.1% with an average of 14%).

*With an average level of the HSC regarding market orientation for the 11 cities of 100, we estimate the Tri-City as being at a level of **100.4**.*

## **HSC: labour market**

The labour market conditions, from a Human Capital perspective, principally relates to the availability of employees with skills sought by employers. In a city with high Human Capital, there should be low unemployment.

As such, the HSC indicator regarding the labour market is measured by the unemployment rate, both overall and that specifically for youth.

The situation on the Tri-City's labour market is relatively favourable. With an unemployment rate of 3.12%, compared with other cities studied, the Tri-City is positioned behind Warsaw, Poznań and Katowice.

Unemployment among youths has a value of slightly above the average for 11 cities and amounts to 13.4% – this places the Tri-City roughly in the middle of the list of cities studied. The overall HSC rating of the labour market for the Tri-City is good.

*With an average level of the HSC for the 11 cities of 100, we estimate the Tri-City as being at a level of **114.2**.*



# People

## ***HSC: civil society engagement***

A high level of engagement in civil society indicates high Social Capital – people are involved in common interest activities .

HSC with regard to civil society engagement is measured by access to Internet resources and average voter turnout (parliamentary elections in 2007, presidential and local government elections in 2010).

The civil society activity in the Tri-City stands out positively in comparison with other cities.

The activity of NGOs (observation in the Internet) is above average – the same as in Lublin and Poznań. The average turnout in elections is definitely high (59% compared with the average for the cities of 56%) – the Tri-City is in second place after Warsaw in this respect.

*With an average level of the HSC in this respect for the 11 cities of 100, we estimate the Tri-City as being at a level of **104.0**.*

*This is a relatively high position – behind Katowice, Warsaw and Poznań.*

With an average level for the 11 cities of 100, we calculate HSC in the Tri-City in this respect at a level of 100.9.

## People Summary

### The Tri-City's Human and Social Capital

In the comparison of the 11 cities, the result places this agglomeration in the middle of the list of cities studied, but compared with other leading centres of Poland, it is less favourable.

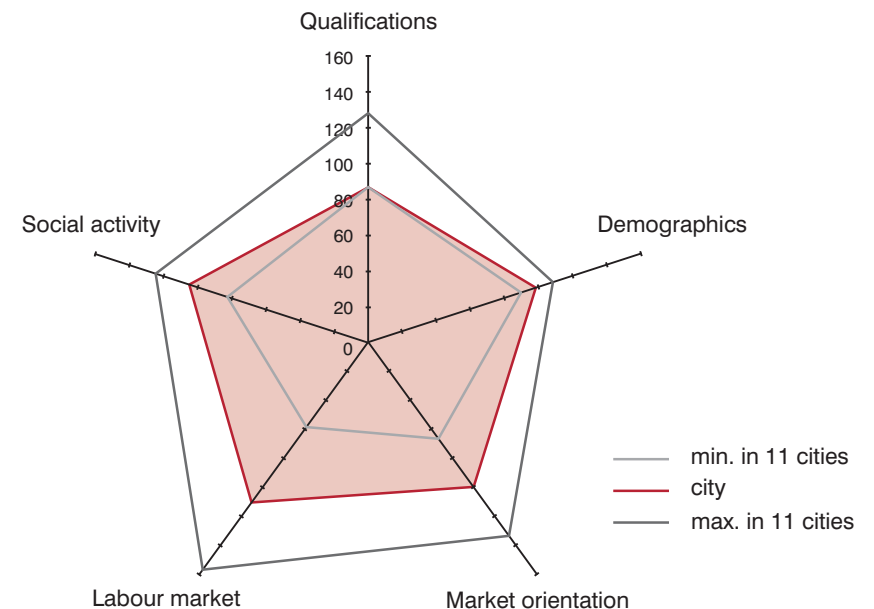
The main weakness is the relatively low – compared with the opportunities – development of the agglomeration as an academic centre, certainly not reflecting its aspirations.

Despite the values being slightly above average, HSC is a major challenge for the Tri-City. The importance of this challenge has certainly been multiplied by the recent transformations of the agglomeration's industrial structure. The common policy of the agglomeration's cities should stimulate development of human resources and market orientation.

The high level of civil society activity could serve as an ally of the policies of the agglomeration's cities.

It is worth emphasising the importance of both creating incentives for the business activities of the inhabitants and the impact on the relevant education policies in the Tri-City's existing centres – whereby the metropolitan area has assets associated with the development potential created by the maritime economy, which are unique on the scale of the whole country. It is very important that the Tri-City as a whole has a large demographic potential – the reinforcement of the agglomeration's HSC will require effective and coordinated development of this capital.

People – Tri-City



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# Quality of Life

## **Why do we measure Quality of Life Capital?**

If a city wants to succeed economically in the long term, it must provide good living conditions for its inhabitants. A high quality of life in a city will cause people to decide to live and work there, including those who will reject offers to move to different domestic or foreign cities, and investors will be more inclined to relocate business activities. A high quality of life also leads to pride and satisfaction with one's own city, while a low quality of life yields disillusionment and frustration.

The quality of life in the city is made up of many factors. The condition of the natural environment is one important aspect, as are access to good quality medical and educational services. A sense of security is of tremendous importance. The best entertainment centres and services cannot guarantee that inhabitants and guests will feel comfortable in the city if a sense of security is lacking.

## **Measuring Quality of Life Capital (QLC)**

Quality of Life Capital largely determines the extent to which the city is considered a good place to live and work. It is the most debatable capital (besides Culture and Image Capital). It is also the most difficult to present as a single ratio. In the Polish market there are several indicators that pertain to various aspects of the function of a metropolitan area. These include for example the number of cultural events or hotels of a given standard.

In our reports, these are covered in the Culture and Image Capital or the Investment Attractiveness Capital.

However, considering the importance of healthcare and sense of security to the overall quality of life, we decided to stay with the definition that was adopted four years ago, which is also consistent with PwC's global methodology. This also allows direct comparability with the previous edition of these reports.

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*Hence, when measuring QLC, we take into account four aspects of quality of life: the condition of the natural environment, level of medical services, level of educational services and sense of security.*

*Cities with a good natural environment give their inhabitants a much greater sense of comfort and satisfaction with life.*

## Quality of Life

### **QLC: condition of natural environment**

Cities with a good natural environment give their inhabitants a much greater sense of comfort and satisfaction with life. It should be remembered that in the field of environmental protection – as in many other fields – commonplace opinions are difficult to overcome, and spectacular failures or successes (such as appearance of fish or bird species which have not been seen for many years) very frequently have greater impact than technical measurements of environmental pollution.

The selected indicators that we use to measure QLC in terms of the condition of the natural environment include air pollution measurements (emission indices for various types of gaseous and dust pollutants), number of cars per km<sup>2</sup> in the city limits, capital expenditures on environmental protection and percentage of treated sewage.

The state of the natural environment in the Tri-City can be considered satisfactory. The values of dust and gaseous pollutants (except CO<sub>2</sub>) place the Tri-City in the middle of the list of cities studied. The index of the intensity of road traffic is the lowest among the major cities of Poland (1030 per km<sup>2</sup>) and is also below the average for the 11 cities analysed (1199 per km<sup>2</sup>). It is worth noting also that the Tri-City treats 99% of its sewage, which significantly reduces the level of water pollution.

In terms of environmental expenditure per capita, the Tri-City presents a value of slightly below average for the 11 cities analysed.

*With an average level of QLC regarding the natural environment for the 11 cities at 100, we estimate the Tri-City in this area as being at **101.5**.*

# Quality of Life

## **QLC: healthcare quality**

The availability of medical services of adequate quality is one of the factors that exerts considerable influence on the assessment of living conditions in the city. While certain problems in this area are common to all Polish cities, individual cities also fare very differently.

The basic ratios selected for measurement of QLC in the area of medical services include the number of physicians per 1000 inhabitants, infant mortality rates, and the ranking of healthcare centres (by the Centre for Monitoring Quality in Healthcare and “Rzeczpospolita”), as well as the average waiting time for an appointment with a given specialist physician. The last two ratios were not available when the previous edition of this survey was carried out.

The results regarding the quality of the health service are doubtless a challenge for the authorities of all Polish agglomerations. However, this is especially noticeable in the case of the Tri-City, where the index reached its lowest value. In terms of the number of doctors per capita, the Tri-City is at the end of the list of the 11 cities studied. Similarly, in terms of the average waiting time for an appointment with a specialist, in the Tri-City it is among the longest. Likewise, the number of points gained in the ranking of hospitals is unsatisfactory.

The infant mortality rate – commonly considered as the most synthetic indicator of population health and the functioning of the health service – is slightly less in the Tri-City than the average for the cities analysed (6 deaths per 1,000 live births).

This places the agglomeration in the middle of cities studied, although it should be noted that in some cities, this rate is lower by almost half (Bydgoszcz and Krakow).

*With an average level of the QLC in this respect for the 11 cities of 100, we estimate the Tri-City as being at a level of **70.7**. This is the lowest value among the cities analysed.*

# Quality of Life

## **QLC: education quality**

The quality of educational services is usually one of the first issues considered when assessing the overall quality of life in a city. Good schools and highly ranked universities attract new inhabitants and are important when making the decision to move, either temporarily or permanently (which results in greater availability of highly skilled employees). Good education also facilitates the city's social and economic progress due to the fact that it positively influences its development prospects. Active innovation and education policy is one of the main priorities for sustainable development specified by the EU document referred to as the Leipzig Charter.

According to this document, cities are centres for the creation and transfer of knowledge, and the sustainable development of metropolitan areas should take into account the need to continuously increase the level of education. The indicators used for measuring QLC include scores recorded by the city's most important universities in the university rankings (in "Perspektywy" magazine), the success rate of high school-leavers in 2009, and results recorded on 6th grade exams and junior high school-leaving exams in 2008. This indicator is new in this edition of the survey.

Based on the indicators used, the level of educational services in the Tri-City is below the mean value for all the cities analysed. In the group of the largest Polish cities, the agglomeration is in an average position in terms of points gained in the ranking of colleges and universities (above Katowice and Łódź). The case is similar with regard to baccalaureate passes – with a pass rate of around 82%, the Tri-City falls below the average for the 11 cities, but is higher than Łódź and Poznań. The results of examinations in primary and junior high schools also position it below the average for the 11 cities.

*With an average level for the 11 cities of 100, QLC in the Tri-City regarding the quality of education is at a level of 94.0, putting the Tri-City in fifth position, and in the penultimate position in the ranking of the 7 largest cities.*

# Quality of Life

## **QLC: sense of security**

Sense of security encompasses many dimensions: physical security of the inhabitants (the crime rate and road traffic safety), protection from natural disasters and accidents, and a sense of security in terms of access to healthcare and job opportunities are all equally important.

While measuring QLC for sense of security we limited ourselves to the area of physical security and used the following indicators: number of recorded crimes and number of traffic accidents per inhabitant.

In the light of the factors analysed, safety is not one of the Tri-City's strengths. The agglomeration has a relatively large number of reported crimes (41 per 1,000 inhabitants with an average of 20 in January-June 2009).

However, the number of collisions and road accidents is similar to the average value for the cities analysed.

*With an average level for the 11 cities of 100, QLC in the Tri-City regarding security stands at a level of 78.8, the lowest among the cities analysed.*

# Quality of Life Summary

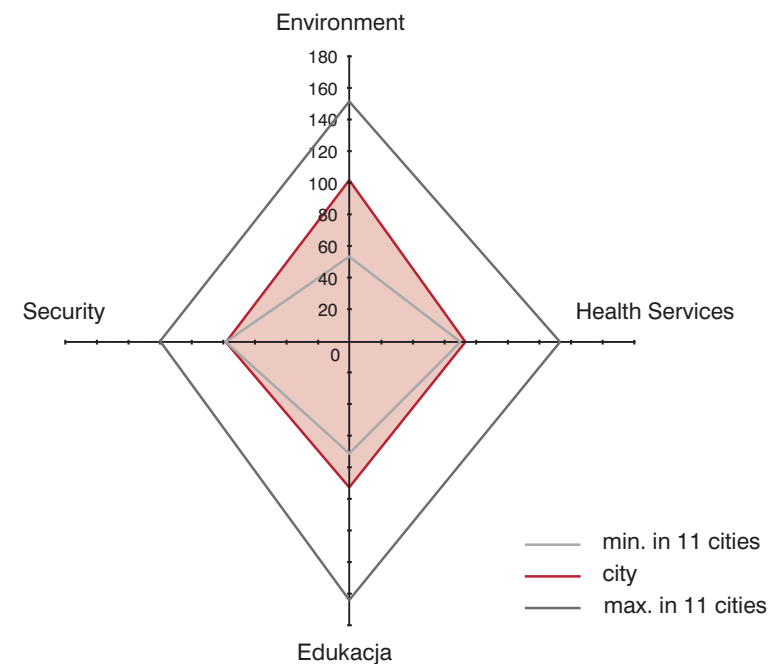
## Tri-City Quality of Life Capital

Next to Łódź, this is the lowest recorded indicator. At this point, we would like to draw attention to the fact that if not for the significant need for urgent action in the area of education, healthcare and safety, the Tri-City's overall result regarding the quality of life would have been much better. (These areas are not included as measures of quality of life in many rankings which are available on the Polish market and hence, you will notice significant differences between the results obtained. In turn, the measures traditionally used in many rankings of quality of life in our methodology will ensure that the Tri-City has a high position in the Culture and Image Capital).

The challenges in terms of quality of life for the authorities of cities in the agglomeration are primarily issues related to safety and the health service and, to a lesser extent, education. This requires urgent actions to be taken if the Tri-City's ambition is to occupy a leading place among the Polish agglomerations. It is also worth adding that, without doubt, the quality of life of the Tri-City is increased by the charm which is typical of coastal cities, but is difficult to include in a study in a quantifiable manner.

*With an average level of 100 for the 11 cities, Quality of Life Capital in the Tri-City is 86.2.*

Quality of Life – Tri-City





# Image

## **Why do we measure Culture and Image Capital?**

In the modern world and in the modern economy, decisions to purchase goods and services are made not only on the basis of actual values, but also on the basis of our opinions about a product. A product's brand is an important aspect of this: its prestige, quality and the trust we have in it. A similar principle holds true for cities. In addition to the things that a city offers its inhabitants and companies, our opinion of it, i.e. its image, is very important. A city that enjoys the image of a robust, friendly and interesting place with a good standard of living will attract both tourists and investors.

The image of the city depends on many factors. Since the previous edition of "Reports on major Polish cities", we have seen tremendously positive changes in Culture and Image Capital at the strategic and qualitative level. In most of the cities, image is no longer shaped by accident but is, to much greater extent, the result of more or less consistently executed promotional strategies. Positive results for cities that started regular promotional activities

early can be clearly seen throughout Poland and Europe. For the others, changing the image among inhabitants, investors and tourists will necessarily involve long-term efforts. In this report we decided to avoid a detailed analysis of the quality, effectiveness and consistency of activities conducted by individual cities in the image-building area, as such processes are to great extent evaluated subjectively. For the purposes of this publication, we limit ourselves to indicators which are objective and measurable.

As this report is being prepared, some of the cities being analyzed are facing tremendous opportunities to shape their image in Europe.

Firstly, Poland will have the presidency of the European Union in the second half of 2011, and subsequently host Euro 2012. In addition, these reports were being compiled, it became known that five Polish cities have qualified to compete further for the title of European Capital of Culture. For Gdańsk, Katowice, Lublin, Warsaw and Wrocław this means very intensive activities in the area of Culture and Image Capital.

However, we see participation in the qualifying round itself as important – it has the potential to start a debate on the how the candidate cities should promote their cultural attributes and may result in several new initiatives and a comprehensive approach to development in this area.

As part of city strategies for development and promotion, Polish cities have been increasingly considering the sustainability of their development strategies. This is of key importance to the cities' development, their image, and the quality of life they will be able to offer in the longer term. Polish cities are increasingly beginning to consider sustainable development issues in a comprehensive and long term manner; this applies to both larger cities and smaller townships. The tasks related to implementation of principles and strategies for sustainable development are also increasingly frequently reflected in lists of duties and tasks for the individual departments of local government bodies.

In sustainability terms, Polish cities are also active internationally: 10 cities signed the mayors' agreement declaring limits on CO2 emissions, and 12 cities (all those covered by this analysis plus Rzeszów) belong to the EuroCity network which includes the largest European cities and focuses on challenges facing the European Union, including climate change and social exclusion.

*Culture and Image Capital is a measure of how the city is perceived – by its inhabitants as well as outsiders.*

# Image

## **Measurement of Culture and Image Capital (CIC)**

Culture and Image Capital is a measure of how the city is perceived – by its inhabitants as well as outsiders. Like many of the capitals, it can give rise to lively debates and strong emotions, and the range of potential indicators that can be used to attain it is very broad.

What is important is the fact that even a broad selection of available indicators does not always mean a the value obtained is precise, making the analysis extra difficult. We preserve the methodology adopted four years ago and, in measuring CIC, take into account three characteristics: general opinions of the city, high culture, and the culture of daily life.

## **CIC: general image of the city**

General image consists of the city's overall recognisability, its generally recognized attractiveness, as well as the perception of its values by its inhabitants (e.g. traditions of honesty and hard work).

The basic indicators we have used to measure CIC as regards general image are: the number of “good associations” with the city on the Internet (e.g. number of websites with the city's name and the word “culture” in them), number of tourists visiting the city, the number of words a city warrants in a typical tourist guide to Poland and tourist opinions expressed on online travel sites, and the observed rate of entrepreneurship (a new indicator for this edition of the survey).

In terms of the overall image, the indicators for the Tri-City have a positive value, which places it above the average for the 11 cities analysed (except for the number of tourists per capita).

The Tri-City is relatively easily visible in the Internet (in this respect, it is only behind Krakow, Warsaw and Wrocław) and in popular guides (only Krakow and Warsaw have a greater presence). However, it appears that popularity in the web is insufficient to translate into the number of tourists per capita (0.638) – apart from Warsaw and Krakow a higher rate is achieved by Wrocław, Szczecin and Poznań.

The Tri-City has a relatively high proportion of people conducting business, which has a positive impact on the overall image of the agglomeration as a business-friendly place.

*With the average level of CIC in terms of overall image for the 11 cities of 100, the CIC in the Tri-City is estimated at 118.5 – the highest after Warsaw and Krakow.*

# Image

## **CIC: high culture**

A city's image largely consists of its activity in the area of so-called high culture. Although a relatively small percentage of inhabitants and guests use such services, these are significant cultural events that are more likely to be publicized in the opinion-making media and shape the city's image as an interesting, attractive and appealing place.

The basic indicators selected for measuring CIC with regard to high culture include the city's culture budget, the number of concerts, film festivals, theatre festivals and classical music festivals, as well as concert attendances (all per number of inhabitants).

In terms of high culture, together with Wrocław, the Tri-City occupies a reasonably strong position, behind Warsaw, Krakow and Katowice. The Tri-City's budget per capita spent on culture is relatively high – higher amounts are only spent in Warsaw, Krakow and Wrocław. In terms of the number of people at the largest concerts per capita, the agglomeration is among the leaders, behind Katowice. The same is true with regard to film festivals (where the leaders are Katowice and Łódź – this situation could soon change after the transfer of one of the festivals to Bydgoszcz) and concerts (it is in third place after Krakow and Warsaw).

*The Tri-City has a slightly weaker position with regard to theatre and classical music festivals, although it is in fifth position among the cities analysed.*

## **CIC: daily cultural life**

A city's inhabitants and guests form an impression of a city on the basis of the daily cultural life: the selection of restaurants, hotels, number of cinemas, number and quality of parks, and number of popular mass events.

The indicators used to measure this aspect of CIC include: the number of cinema seats, number of restaurants, number of sport stadium seats (including those under construction, including planned Euro 2012 facilities) and the green areas within the city's administrative boundaries (all per number of inhabitants).

The indicators of the culture of everyday life in the case of the Tri-City are relatively low – especially in comparison with other major Polish cities, but also smaller cities (such as Bydgoszcz).

The number of seats in cinemas and restaurants per capita is slightly below the average for the 11 cities analysed. In turn, in the case of seats at stadiums, including those planned for opening, per capita, the Tri-City ranked second among the cities studied after Katowice.

It is worth noting that, apart from Białystok, the Tri-City had the lowest value of areas of greenery per capita. However, this is largely compensated by the special attraction of coastal cities.

*With an average level of the CIC for the 11 cities of 100, the indicator for the Tri-City regarding culture of everyday life is **90.8**.*

With an average level of 100 for the 11 cities, Culture and Image Capital in the Tri-City is 110.7. The value is comparable to Wrocław's results.

## Image Summary

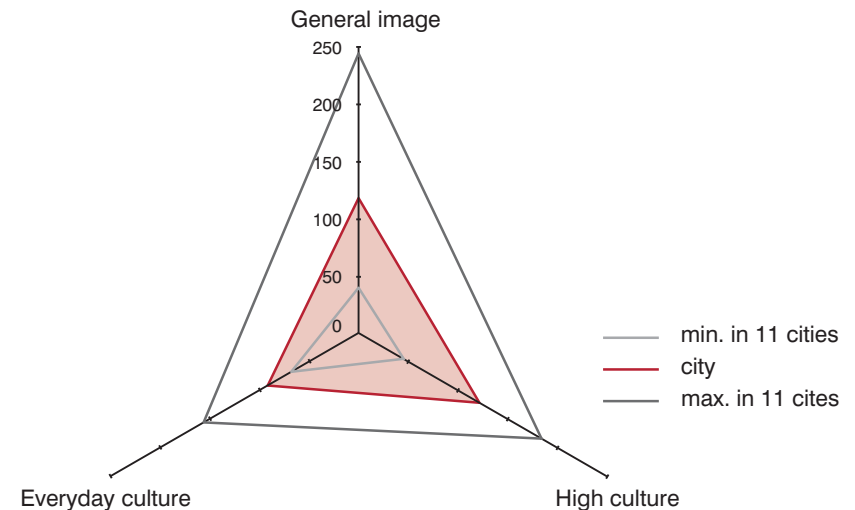
### The Tri-City's Culture and Image Capital

The Tri-City presents itself well both in terms of the overall image and its place on the map of high culture, but turns out slightly worse in the culture of everyday life. It follows from this that some elements of the agglomeration's Culture and Image Capital require intensive development, supported by the authorities of the individual cities making up the agglomeration.

Without doubt, this would be well supported by closer cooperation of these cities, taking advantage of their diversity to increase the attractiveness of the image of the agglomeration.

Promotional activities conducted jointly can be more effective, especially for foreign markets, and, in this context, the "Partnership Declaration Promotion of Gdańsk, Sopot and Gdynia" signed in the autumn – if it does its job – appears to be a step in the right direction. In the case of Tri-City, a major advantage is its tourism attributes and these can be boldly used to an even greater extent in promotions, including business tourism.

Image – Tri-City



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# Institutions

## ***Why do we measure Institutional and Democratic Capital?***

Institutional and Democratic capital determines the degree to which institutions which manage the city function effectively, e.g. city authorities, public administration and maintenance services. It also reflects the level of civic activity of inhabitants and effectiveness of democratic mechanisms, as well as the level and effectiveness of communication between the authorities and the society.

In cities with high Institutional and Democratic Capital, it is easier to develop and exercise a consistent development strategy. Authorities which are controlled democratically can perform their duties more effectively and have a stronger social mandate for managing the city, while the activities of the citizens supports them on the road to achieving common goals. This facilitates the achievement of success in terms of economic and social development.

## ***Measuring Institutional and Democratic Capital (IDC)***

The Institutional and Democratic Capital of a city is made up of the quality of the authorities' actions, the activities of the inhabitants, and communication between the authorities and the people.

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*IDC is measured in three areas: the effectiveness of municipal institutions (authorities and public administration), their performance of the basic function of ensuring public safety, and non-governmental organization activity.*

# Institutions

## **IDC: administrative effectiveness**

Opinions regarding the city's authorities and administration are based on the experiences of inhabitants and visitors. These judgments are influenced by the way the authorities communicate with the society: whether citizens are included in strategy development, and whether explanations of the problems and goals of various activities is provided. A constructive dialog with inhabitants contributes to both a streamlined process of strategy development as well enhanced performance, since a document developed in a such a manner will better take into consideration the problems facing inhabitants and offer solutions.

The primary indicators used to measure IDC in terms of the effectiveness of municipal institutions are: administration expenses (compared to the population), indicators of the effectiveness and availability of offices indicated by waiting times for entry in the economic activity register, office opening hours that reflect citizens' needs, and opportunities to use online office services (new in this edition), and the percentage of votes received by the incumbent president in the local government elections of 2010 (also new in this edition).

The efficiency of municipal institutions in the Tri-City is at a lower level than the average value for the remaining cities studied.

The waiting time for an entry in the register of sole proprietors is similar to that of Łódź and shorter than in Katowice, Wrocław and Warsaw, but longer than the average for the 11 cities. Likewise, spending on administration per capita is at a level which is slightly below the average. The observed access to the city council is at the average level for the 11 cities analysed. In terms of the availability of administrative services through the Internet, the Tri-City is positioned in the middle of the list of the cities analysed, but below the average. A high percentage of votes cast for the current mayors in the 2010 local elections suggests that the inhabitants accept the efficiency of the municipal institutions.

*With an average level of IDC regarding efficiency of administration for the 11 cities compared of 100, we estimate the Tri-City in this respect as being at **99.9**.*

# Institutions

## **IDC: public safety expenditure**

Assessment of municipal institutions is largely based on their actions in the crucial area of safety: expenditure on law and order services, and the extent to which people trust these services. It is worth noting that citizens' assessments of authorities' efforts in this area can be separate from their actual perception of security (taken into consideration in the Quality of Life Capital) – in other words, there are cities with a high crime-rate despite the considerable efforts of the authorities, as well as cities where both expenditure on safety and crime-rates are low.

In measuring IDC in terms of public safety, the following indicators were used: the city's expenditure on safety, the number of police and city guards (all per 1,000 inhabitants) and the crime detection rate.

The Tri-City, as mentioned above while analysing the quality of life, is an agglomeration in which the level of the sense of security of the inhabitants needs to be improved. It is particularly related to the large number of reported crimes. However, in terms of spending on public security, the situation is much better, which means that the agglomeration is trying to bring about improvements. Despite somewhat lower spending on security than in other cities, which is reflected in the smaller number of police officers and city wardens per capita than in other cities, attention should be drawn to the very high effectiveness of the investigative authorities compared with other cities (the highest detection rate in the country) .

*With an average level of the IDC in terms of spending on security for the 11 cities of 100, the Tri-City is at a level of **106.9**.*

## **IDC: non-government organization activity**

A high level of non-government organization activity contributes to the better operation of democratic mechanisms, increased scrutiny of authorities' actions on the part of citizens, fostering of partnerships between the city's inhabitants and its authorities, as well as the increased involvement of citizens in working out and implementing a city's development strategy.

IDC in terms of non-government organization activity is measured by analysing Internet sources to ascertain the number and level of activity of non-government organizations registered in the city.

The activity of non-governmental organisations in the Tri-City is slightly higher than the average. There are approximately 5.2 organisations per 1,000 residents, compared with an average of 5 in the 11 cities. In this respect, the Tri-City is second to none of the other large cities of Poland, apart from Katowice and Warsaw, which are ahead in this respect. The activity of Tri-City NGOs (Internet observation) is also slightly higher than average.

*With an average level of the IDC regarding NGO activity for the 11 cities of 100, we estimate the Tri-City as being at a level of **103.7**.*

# Institutions Summary

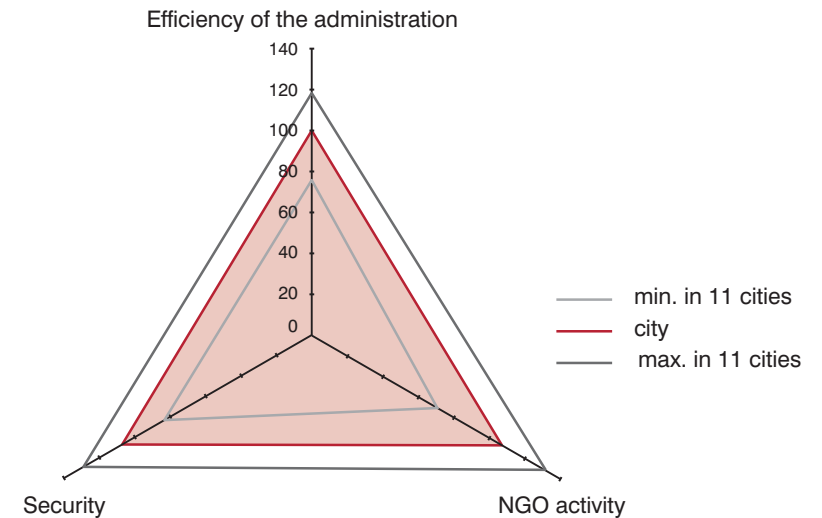
## **The Tri-City's Institutional and Democratic Capital**

The Tri-City's Institutional and Democratic Capital, like Katowice, places the agglomeration in the middle of the list of cities studied, although it is significantly below the leading large cities (Poznań, Krakow and Warsaw). This result is primarily influenced by areas associated with the efficiency of functioning of the administration.

*With an average level for the 11 cities of 100, the Tri-City's Institutional and Democratic Capital is 103.5.*

Therefore, the challenge is for the agglomeration is mainly to introduce procedures to improve the process of providing local government administrative services.

## Institutions – Tri-City





# Infrastructure

## **Why do we measure Technical and Infrastructural Capital?**

Effective infrastructure – including efficient transport, housing resources, services infrastructure, media and utilities (both more traditional such as power and water, and modern such as telecommunication and the Internet) is a prerequisite for creating an efficiently functioning metropolis where people can live and do business. The advantages that flow from well-developed Technical and Infrastructural Capital directly influence the other Capitals, in particular Quality of Life, Human and Social, and Investment Attractiveness. Without sufficient, or sufficiently developed, Technical and Infrastructural Capital, progress in the other areas will be considerably slower than in cities with well developed infrastructure, and people's quality of life deteriorates, the city's image worsens, and its attractiveness as a place for locating investments diminishes.

For these reasons, we regard Technical and Infrastructural Capital as warranting special attention.

It is important to remember that to have effective infrastructure in place requires not only the presence of concrete resources such as transport systems, buildings, equipment and installations, but also a level of organizational efficiency in management and administration that allows these to be fully utilized. The actual Technical and Infrastructural Capital level often depends also on the efficient operation of the markets for services, media and utilities and housing. Renting or buying appropriate housing is as difficult as in a city with no housing resources available as it is in a city with extensive housing resources but an inefficient market .

## **Measuring Technical and Infrastructural Capital (TIC)**

The city's Technical and Infrastructural Capital has a strong impact on the city's attractiveness as a place to live and do business. The TIC assessment is usually based on the experiences and observations of the city's inhabitants and visitors. Negative opinions that gain traction can destroy a city's image, even it does well in other areas.

*In our opinion, there are four kinds of infrastructure crucial for successful development: transport infrastructure, energy and IT infrastructure, housing infrastructure, and trade and services infrastructure.*

# Infrastructure

## **TIC: transport**

A general assessment of the efficiency of the transport network in the city needs several factors to be taken into consideration: road infrastructure, alternative forms of transport, the quality of public transport and the quality of the city's connections to the outside world.

The indicators used to measure TIC for transport are: density of the road network, number of bicycle lanes, number of public transport seats in relation to the population, as well as the number and quality of the city's connections to the outside world: the number of direct flights (airports within a 100 km radius), time taken (by train) to reach the five largest Polish cities (a new indicator in this edition of the survey), access to the European motorway network (a new indicator in this edition of the survey). In combination, these indicators give us a general idea of the quality and development of the city's transport infrastructure.

From the point of view of infrastructure, the Tri-City is still an area with tremendous potential, which, in light of the factors analysed, could be better utilised. In some cases, it is so because of the issues which are independent of the authorities of the individual cities in the agglomeration.

The density of the road network in the Tri-City is one of the lowest (ahead of Bydgoszcz) of the cities studied. At this point, it is worth remembering the unique urban nature of the agglomeration, which has a polycentric system and is located in a large area. The density of the network of cycle paths has a value reflecting the average for the cities studied, although there are plans to build further routes of the highest European standard over the coming few years. However, the number of seats available in public transport per capita is relatively high (positioned behind Warsaw, Wrocław, Szczecin and Łódź). In terms of flight and ferry connections, the agglomeration recorded a marked improvement in recent years - it is in third position, after Warsaw and Krakow. The indicator is also improved by regular ferry services, which, for obvious reasons, other cities lack. A certain deviation from these characteristics is the existing location of the Tri-City which is peripheral to the European motorway network. This issue will change soon - after the construction of the A1 motorway and the upgrade of the road between the existing Tri-City and Szczecin to an expressway standard. However, the current quality of rail services looks very bad (again, the situation will change with the completion of the upgrade of the route to Warsaw).

*With an average level of 100 for the 11 cities, TIC regarding transportation in the Tri-City is **98.2**.*

*The availability of low-priced apartments or houses in the city depends both on the number and quality of housing resources in the city and on the efficiency of the real estate market.*

## Infrastructure

### **TIC: apartments**

The availability of low-priced apartments or houses in the city depends both on the number and quality of housing resources in the city and on the efficiency of the real estate market. A more efficient market will facilitate the attraction and retention of highly-qualified workers in the city, and draw new investors to the city.

The primary indicators used to measure TIC in terms of housing are: number of housing units per 1,000 inhabitants, quality of the housing resources (measured as percentage of units with bathrooms), the growth rate of housing resources and average rents on the secondary market.

The Tri-City's housing stock is among the best among the cities studied. It has 409 flats per 1,000 inhabitants, which is slightly below the average in the 11 cities analysed (average 413). However, it should be emphasised that the quality of the Tri-City's housing stock is relatively good – the percentage of flats which are lacking the basic amenities is among the lowest of the cities compared. Attention should also be drawn to the high rate of growth in the quantity of new housing – 6.6% compared with the average of 4.9% for the cities analysed.

However, the prices on the housing market are higher than the average for the 11 cities – it is worth emphasising the internal differences within the agglomeration in this respect – Sopot in which real estate is among the most expensive in Poland.

*With an average level of 100 for the 11 cities, TIC regarding housing resources in the Tri-City is **104.5**.*

# Infrastructure

## **TIC: media and utilities**

Without efficiently and reliably supplied media and utilities, it is difficult for a city to establish an image as a good place to live, and above all, a good place to do business. This is true both for the traditional utilities (power, gas, water) as well as modern media mechanisms (telecommunication, internet), which afford innovative growth opportunities and make it possible for citizens to make full use of their knowledge and skills.

The following indicators were used to measure TIC in this respect: the percentage of people using the water supply and sewage networks, power consumption by households (which is associated with the number of durable goods in a household), the estimated number of Internet users (per 1,000 inhabitants), and the percentage of the city area covered by free access to wireless Internet (the last two indicators are new in this edition of the survey).

The picture of the Tri-City is relatively uniform and clearly advantageous compared with the other cities analysed in terms of traditional utilities – a high level of coverage with a sewage system and high energy consumption per capita. The Tri-City is also distinguished by a high (albeit lower than in the other large Polish cities) estimated number of Internet users per capita. However, the challenge is to cover the area of the city's infrastructure with free Internet access. In this respect, it is positioned among the lower levels of the list of cities studied, however, before Warsaw, Białystok and Poznań.

*With the average level for the 11 cities of 100, TIC in the Tri-City in terms of utilities is at a level of 94.6, mainly as a result of a lower level of coverage of the area of the agglomeration with an infrastructure of free Internet access compared with most other cities studied.*

## **TIC: trade and services**

Market services, especially trade, financial, hotel and catering services, create the market infrastructure necessary for ensuring a well functioning economy. These services are usually highly correlated: cities which offer e.g. large, modern shopping spaces also typically offer other services of high quality.

When measuring TIC for trades and services, we used the following indicators: area of modern shopping space, number of ATMs, and number of shops, hotels and restaurants per 1,000 inhabitants.

In terms of retailing space per capita, the Tri-City is second only to Warsaw, Wrocław and Poznań, having floor space of 670 m<sup>2</sup>.

The situation is somewhat worse in the agglomeration in terms of the number of ATMs, as well as shops, hotels and restaurants per capita.

The indicators present values which place the agglomeration below the average, which cannot be compatible with the aspirations of its cities.

*With an average level of the IDC regarding retailing and services for the 11 cities of 100, the Tri-City is at a level of 97.6. The Tri-City is behind Warsaw, Krakow, Poznań and Wrocław in this respect.*

# Infrastructure Summary

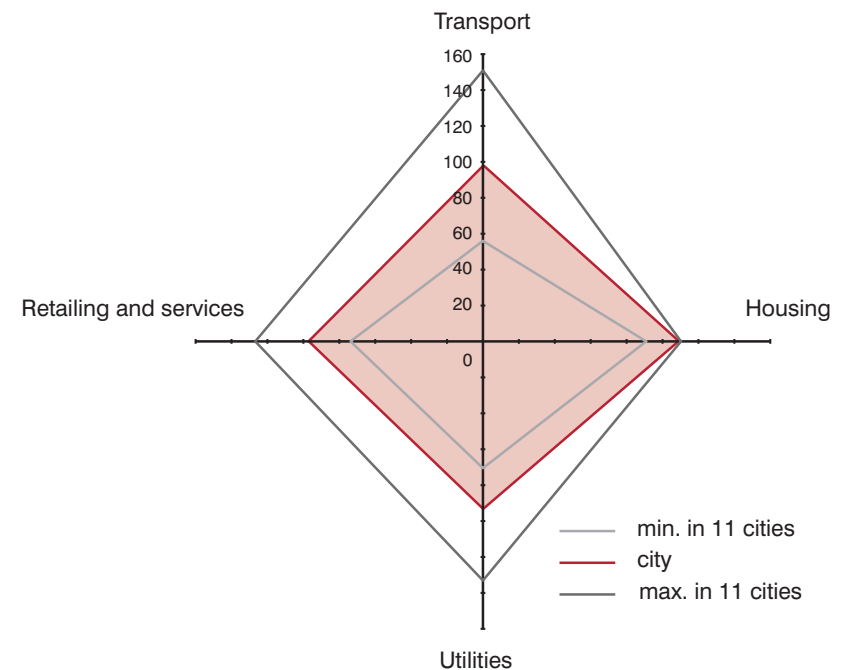
## **The Tri-City's Technical and Infrastructure Capital**

The situation regarding housing stock, as well as retailing and service is relatively good. Similarly, in terms of transportation and the utilities, there is no reason for extreme ratings, but the situation should certainly be improved.

However, it should be pointed out that an average position in the report in the area of this capital can be inadequate for an agglomeration, which can benefit from many advantages of its position and urban structure. For this reason, an improvement in the Technical and Infrastructure Capital should be one of the priority challenges for the cities of the agglomeration. The problem to be solved is the improvement in the coordination of the activities of the three cities in this respect.

*With an average level of 100 for the 11 cities, Technical and Infrastructure Capital in the Tri-City is 98.7.*

Infrastructure – Tri-City



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# Finance

## ***Why do we measure Sources of Finance Capital?***

Sources of Finance Capital refers to the ability of a city to access the funds necessary for financing its own development. Such funds can come from various sources: tax revenues, government subsidies, EU funding, revenues from issuing securities or contracting loans. They may also include private sector funds that are used for financing undertakings necessary for the city's development.

To develop successfully, present-day cities need to make investments that deliver efficient infrastructure, desired quality of life, and effective operation of public institutions. A good development strategy is not enough – sufficient funding is required to achieve the goals. This second edition of the “Reports on major Polish cities” is being published at a time when the world economy is still in crisis, and as Poland is struggling with an economic slow-down resulting in decreased budget revenue.

While investment is a desirable goal, it's also a particularly difficult one to achieve nowadays. Admittedly, we do have access to considerable financial resources from the European Union budget. However, to be able to take full advantage of these, we need to find considerable funding of our own for co-financing. Taking a long-term view, city development requires us to urgently modernise infrastructure and improve public services, despite the current economic downturn. At the same time, however, increased risk aversion among financial institutions has caused them to view large investment projects with a new caution and distrust. Such a complex economic situation makes acquiring the necessary funding for city investment difficult. Costs are also increasing, as a result of the imposition of higher margins by financing institutions, as well requirements for additional guarantees. A limited budget and continuously rising costs will mean that there simply might not be sufficient funds for some investments.

Cities with high SFC value are those that are able to source the necessary amounts of funding, drawing on various sources, so as to achieve the best results with as low funding acquisition costs as possible. In an environment as complex as the current one, Sources of Finance Capital becomes particularly important; maintaining it at a high level is decidedly more challenging than during the boom times. That is why in this edition of the reports we decided to focus on this Capital, and pay more attention to the methods of finance acquisition that are less onerous to the local government budget.

## ***Measurement of the Sources of Finance Capital (SFC).***

SFC should be understood as the ability of cities to finance projects essential to their growth. Well developed SFC shows that a city is able to acquire sufficient funds for such purposes, from diverse sources.

The following four aspects are analysed for the SFC assessment: tax base (the city's GDP), budget financing, funds from the financial market (loans), and EU funds. We would like to emphasize that, in the long term, Polish cities should aim at engaging more private sector funds, mainly in the form of public-private partnerships.

# Finance

## **SFC: revenue base**

The principal revenue base of a city consists of the income obtained by its residents. Local taxes may be levied on such income in varying degrees, depending on the policies adopted. In general, the higher the economic activity of the city, the higher the current and future revenue of the city's budget, which allows for financing various investment projects.

SFC assessment in terms of the revenue base is done based on GDP per capita.

In 2008 (the latest data available from the CSO), the Tri-City's GDP per capita was below the average for the 11 cities and, apart from Łódź, was the lowest among major Polish cities (135% of the average GDP per capita in Poland).

*With an average level of the SFC regarding the income base for the 11 cities of 100, we estimate the Tri-City as being at a level of **86.1**.*

## **SFC: budget financing**

Budget financing comprises the funds that a city has in its own budget (the sum of its own funds, and the subsidies and funding received by the city from the central budget). The main benefit of financing development from the budget is that it does not involve any increase in the city's debt. There are, however, also certain drawbacks resulting from such financing. Budget funds are always limited to some extent. Moreover, in the long run, providing extensive funding from the city's own budget can only be done through applying high local charges and taxes. This in turn may negatively influence the economic climate of the city.

The SFC for budget financing comprises the total revenue of the city's budget (including subsidies from the central budget), its own revenue (in both cases per capita) and the share of capital expenditures in the city's budget.

In 2009, the total budget revenues of the cities in the Tri-City agglomeration were over PLN 2.8 billion, which gives a per capita income of the order of 3800 zlotys – this is slightly lower than the average for the 11 cities analysed (4000). However, the share of investments in the expenditures of the cities in the Tri-City agglomeration was an average of 22% and was essentially equal to the average for the cities studied.

*With an average level of the SFC regarding the budget funding for the 11 cities of 100, we estimate the Tri-City as being at a level of 97.6.*

*Financing development with funds from the financial market is beneficial, as it provides the opportunity for investments that could not be covered from budget funds to be carried out.*

## Finance

### **SFC: market financing**

Funds originating from the financial market may be acquired by contracting loans from banks or issuing municipal bonds. Financing development with funds from the financial market is beneficial, as it provides the opportunity for investments that could not be covered from budget funds to be carried out. The negative to this is increasing city debt. However, when analysing Polish city debt levels, it should be noted that debt and investment are usually correlated. This means that low debt levels may reflect a low level of investment.

High debt levels are negative if the funds acquired through loans are for current expenditure or investment projects with no economic justification. Using loans to finance projects that help economic development may be correct in the long-term; however, in the initial analysis phase, cities should consider all the forms of financing available.

SFC measurement in terms of market financing includes: the city's debt to revenue ratio for 2009, i.e. the latest audited data available (pursuant to the Public Finance Law, the proportion should not be higher than 60%) and the city's credit rating.

The situation of the Tri-City regarding market financing is good – on average, the cities of the agglomeration have a moderate level of debt (approximately 35%).

In terms of the rating (Gdańsk has one), the agglomeration can be positioned in the middle of the ranking (BBB +).

*With an average level of the SFC regarding market financing for the 11 cities of 100, we estimate the Tri-City as being at a level of **110.1.***



*Cities can use development funds as structural resources thanks to Poland's membership of the European Union.*

## **Finance**

### **SFC: EU funds**

Cities can use development funds as structural resources thanks to Poland's membership of the European Union. These are non-refundable grants covering the major part of project costs serving the goals of regional development and quality of life improvement. Access to such funds is very beneficial for the city (although finding the city's own share for co-financing may pose a problem). Acquisition of EU funds is, however, a fairly complex process and the procedures related to correct use of such funds tend to be burdensome.

The SFC related to EU funds is based on the total amount of money from EU funds used for co-financing current and planned projects (in the budgets of 2007-2013, on the basis of data from the Ministry of Regional Development, correct as of June 2010, including projects for which contracts have been signed with the Municipal Offices and municipal companies), on a per capita basis.

In terms of the use of EU funds to co-finance projects, the result for the Tri-City according to the methodology used is below the average for the 11 cities.

*With an average level of SFC regarding European funds for the 11 cities of 100, we estimate the Tri-City in this respect as being at **75.8**.*

# Finance

## **SFC: public-private financing**

Public-private funds are those that the city gains through contracts with private investors with, as a result, projects important for the city's development being financed by the private sector. The use of public-private financing should be treated as the reflection of skilfulness of a city in acquiring funds for development.

When preparing our reports four years ago, we hoped that this index would be included in the SFC assessment in this next edition. However, despite high hopes and the potential of PPP development in Poland, public procurement where a private partner is selected on the basis of principles set out in the Public-Private Partnership Act is still not carried out in numbers sufficient for making such an assessment. A high number of tender announcements for private partner selection (PPP or concessions) published recently (on average 40 announcements per year were published in 2009-2010) constitute proof that this form of project execution is more often being considered.

A significant increase in the interest shown by private entities in projects in the form of PPP or concessions has also been noticeable in the last two years. Regrettably, in only a few cases was the public contract award procedure and selection of the private partner successful (e.g. construction of underground car park in Wrocław and Kraków, construction of indoor swimming pool in Oława, development of the lakefront in Chełm). The majority of tender procedures are cancelled due to lack of interest among private partners. This lack of interest results from poor project preparation and a tendency of the public sector to transfer most of the risk to the private partners. In practice, it is hard to talk about the PPP projects that are already underway, and we decided not to include public-private financing in the SFC assessment.

*At the same time, we would like to emphasise the importance of the future development potential of Polish cities and in the appropriate parts of the reports we indicate how individual cities are approaching forms of infrastructure project financing that are still fairly new to our market.*

*With the average level for the 11 cities of 100, Sources of Finance Capital in the Tri-City is 92.4, which places the agglomeration in the middle of the cities analysed.*

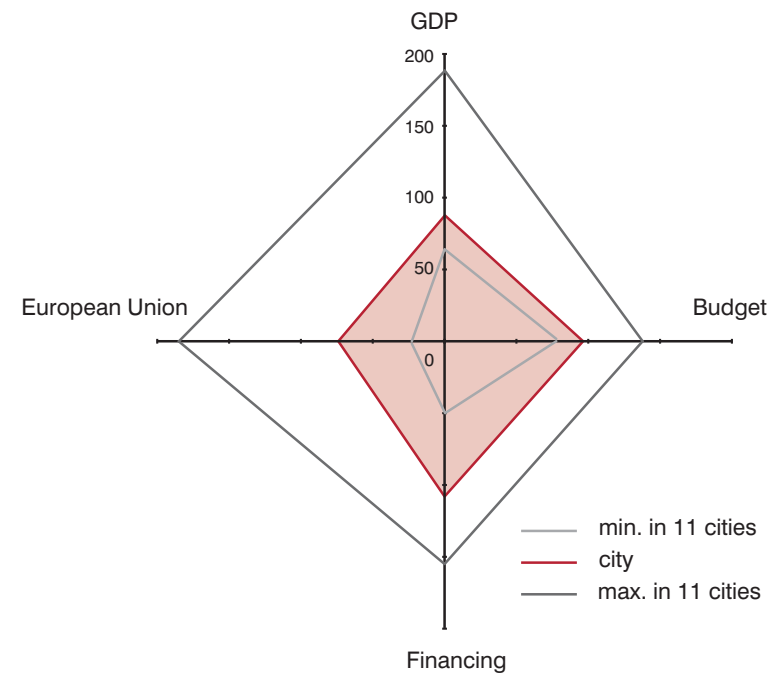
# Finance Summary

## Tri-City's sources of Finance Capital

This is quite a favourable rating, given the more modest income base than in other large cities. Of course, this begs the question of what can the cities from the agglomeration do to increase this income base within a specified time horizon? The further active attraction of new investments creating high added value, support of entrepreneurship of the inhabitants of cities, taking effectively measures to promote the economy and tourism are just some of the answers to this question. The cities of the agglomeration have a stable income base, which arises mainly from the high level of economic activity and a well-managed budget. They cope well with raising funds from the financial market, but slightly worse in terms of reaching out for EU grants. The advantage of the agglomeration's cities is their relatively stable budget situation and experience in acquiring external funding. In this latter case, it can be noticed that the level of utilisation of EU funds, albeit currently not bad, could be somewhat higher. It is also worth noting that some of the cities of the agglomeration are active in their search for innovative forms of financing urban

investments. At this point, it should be stressed that Gdańsk was the first city in Poland to use forfeiting in the modernisation of a city street (Nowa Wałowa). Likewise, Poland's first transaction with features of PPP – an operator contract to operate the water supply and sewage network was concluded as early as in 1992 with respect to lands in Gdańsk and Sopot. This trend, which is reflected in such activities as the implementation of public private partnership / concession projects for construction works and services (such as the revitalisation of the railway station and surrounding lands in Sopot, a contract for the maintenance and operation of the sports hall on the border between Gdańsk and Sopot and car parks), revitalisation projects in Gdańsk and the construction of a tourism infrastructure in Sopot, is certainly worth continuing and improving in operational and financing terms. It is also worth emphasising how important taking advantage of synergies is in the case of a polycentric agglomeration when implementing individual projects – joint ventures between the individual cities of the agglomeration are not currently the rule; hence, the challenge for the Tri-City is to change this approach.

Finance - Tri-City



*Investment Attractiveness Capital is essential for the city's future development.*

## **Investments**

### ***Why do we measure Investment Attractiveness Capital?***

Investment Attractiveness Capital reflects a given city's attractiveness as a location for business activity, and thus its capacity to attract investors. Perception is crucial; this capital is not always directly connected with the city's actual strengths and weaknesses. Cities providing very good investment conditions sometimes are regularly ignored by investors, while other cities actually offering worse conditions are popular.

Very often investors do not act rationally. They tend to make new investments where they have invested in the past, even if the conditions offered by other cities may be better. Subjective and secondary factors may also influence decisions about where to launch investment: the city's accessibility for travelling businessmen, the goodwill of local administrative bodies and the first impressions from the visit. A city that is not perceived as a good investment location should strive to change this by any means possible. Investment Attractiveness Capital is essential for future development.

### ***Measuring Investment Attractiveness Capital***

Investment Attractiveness Capital has a strong influence on a city's development opportunities. As evaluation of investment attractiveness is not always entirely rational, cities can only patiently strive to promote a positive image. Awareness of the business potential of a city, and identifying the sectors that the city is best suited to meeting the needs of, are pre-conditions. Therefore, drawing up a clear and transparent planning policy and strategies for its effective implementation is critically important.

Investment Attractiveness Capital is measured above all by analysing a given city's success in attracting investors, both foreign and domestic. We also take into account investment conditions, that is those factors that may enhance the image of the city as a good business location.

# Investments

## **IAC: attractiveness to foreign investors**

To evaluate a city's level of perceived investment attractiveness to foreign companies, we analysed the level of existing investment and data concerning the availability of skilled employees.

The indicators used to measure IAC for attractiveness to foreign investors include: number of foreign companies that have invested in the city in the last three years, and the number of graduates from technical and scientific universities located in the city or in its vicinity (distance of up to 50 km) who completed their education in the last three years.

The indicators of attractiveness for foreign investors based on the accepted measures are relatively low for the Tri-City compared with other major Polish cities. However, it should be remembered that the substantial improvement in the quality of investor relations and promotional activities made recently to attract foreign investors, does not immediately translate into a visible effect in the measures, because building an image of a business-friendly area is a long-term process. The fact that that recent times are characterised by a decline in foreign investments because of the global financial crisis is not insignificant.

The number of foreign investors per capita is at a moderate level – lower than in Warsaw, Wrocław and Poznań. In turn, the number of technical and science graduates, who left education in the past 3 years is also moderate compared with other academic centres (around 14 k in the agglomeration compared with an average of 20 k for the 11 cities).

*With an average level of 100 for the 11 cities, IAC regarding attractiveness to foreign investors in the Tri-City is **69.9**.*

# Investments

## **IAC: attractiveness for domestic investors**

Domestic companies are usually more aware than foreign companies of the strengths and weaknesses of given cities as investment locations, and their decision-making can therefore be more rational. This is true particularly for large domestic companies, which very often have significant freedom in choosing the most suitable investment location for the long term.

The basic indicators used to measure IAC for domestic investors in this respect are: the total value of the companies' capital expenditures per capita (demonstrating their investment in a given location), relationship between capital expenditures and fixed assets (indicating growth of or reduction in business engagement in a given location), number of innovative companies operating in the city (as per the INE PAN, BRE Bank and Gazeta Prawna ranking) and wage levels (as relatively low wage levels should attract investors).

In turn, the Tri-City's investment attractiveness from the point of view of domestic companies is relatively high and, in this aspect, the agglomeration ranks second after Warsaw.

Capital expenditure per capita is approximately 40% more than the average for the cities. Its ratio to fixed assets is highest among the cities analysed. This is influenced by the level of salaries which is still quite favourable for investors, in comparison with other major Polish cities.

However, the presence of Tri-City firms in the ranking of innovative firms is relatively low, which results in a slight decline in the overall assessment of this aspect of investment attractiveness.

With an average level of 100 for the 11 cities, IAC regarding attractiveness to domestic firms in the Tri-City is **113.7**.

# Investments

## **IAC: investment conditions**

When considering, for instance, the level of human capital or infrastructure in a city, subjective assessments of its suitability for investment and business activity may hold more sway than its actual advantages. This analysis takes into account factors that may encourage or discourage companies, especially foreign ones, from investing.

The indicators used to measure IAC for investment conditions include: the percentage of a city's area covered by spatial development plans, the number of language and international schools, and the number of beds in 4- or 5-star hotels (compared to the city's population).

As for the conditions for investment, the indicators calculated for the Tri-City place the agglomeration among the leaders, ranking it second to Warsaw.

It is especially worth mentioning an issue which is still exceptional in Polish cities - coverage of the area with land use plans (the highest rate among the cities studied – an average of 57% in the Tri-City and 81% in Gdańsk alone). The indicators of hotel services of a higher standard and language schools place the Tri-City in fourth place among the cities studied. However, given that the International School of Gdańsk started operating in Gdańsk in 2010, this indicator will improve in the coming years.

*With an average level of the IDC regarding investment conditions for the 11 cities of 100, the Tri-City is at a level of 147.9. This indicator places the Tri-City in second place, after Warsaw, in this sub-category of the study.*

# Investments Summary

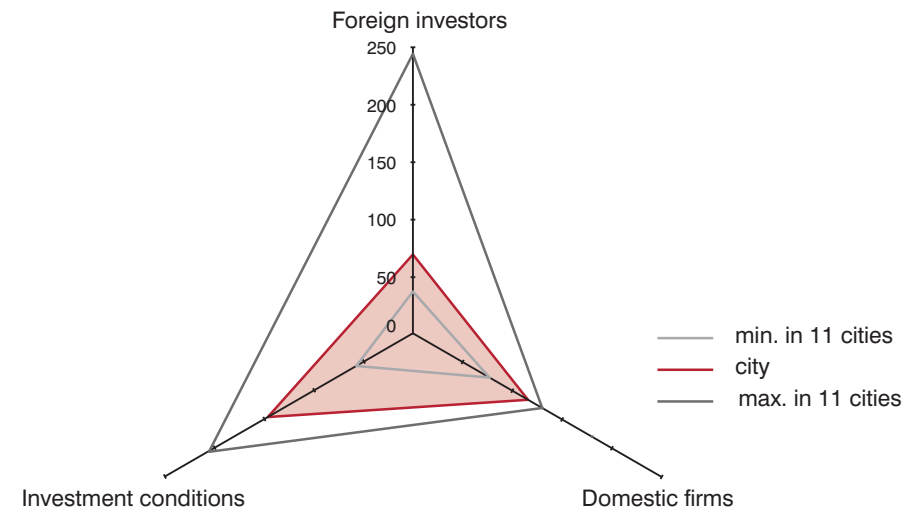
## **The Tri-City's Investment Attractiveness Capital (IAC)**

Based on the measures defined above, the city is clearly behind Warsaw, Wrocław, Poznań and Krakow in terms of this capital. The problem of the relatively low attractiveness of the Tri-City to foreign investors requires detailed analysis. It seems that this result was affected by transportation inconvenience. In addition, deficiencies in the education infrastructure, in the case of which improvement is the responsibility of the authorities of the cities, could have had some influence.

Once again, the negative impact of under-development in the Tri-City as an academic centre is also confirmed. However, when talking about the Tri-City's investment attractiveness, a clear improvement should be noted in the quality of service of foreign investors in recent times, as well as in the cities becoming proactive in attracting foreign investments, which have not yet had the opportunity to be reflected in the measures used. At this stage, we can indicate a positive direction of change – the extent to which the activities conducted prove effective in practice, will be evaluated by investors.

*With an average level of 100 for the 11 cities, Investment Attractiveness Capital in the Tri-City is 100.4.*

Investments - Tri-City





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